

IN THE CLAIMS

~~Please delete claims 2, 8, and 14. Please amend claims 1, 7 and 13 as follows:~~

- 506
B2
1. (Amended) An extensible file access method for accessing a foreign file system from a local data processing system with a native file system, said foreign file system being located on a remote data processing system, said foreign file system having a set of foreign file attributes corresponding to each of a plurality of files in the foreign file system, and said native file system having a set of native file attributes corresponding to each of a plurality of files in the native file system, said method comprising the steps of:
- 3 remote data processing system, said foreign file system having a set of foreign file attributes
- 4 corresponding to each of a plurality of files in the foreign file system, and said native file system
- 5 having a set of native file attributes corresponding to each of a plurality of files in the native file
- 6 system, said method comprising the steps of:
- 7 generating a request from a client on the local data processing system to the remote data
- 8 processing system to open a foreign file in the foreign file system;
- 9 opening of the of the foreign file by the foreign file system;
- A3 10 sending of the file attributes of the foreign file, hereinafter foreign file attributes, to the
- 11 local data processing system;
- 12 storing of the foreign file attributes by the local data processing system;
- 13 determining a subset of the foreign file attributes which are equivalent to a corresponding
- 14 subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter
- 15 known as conventional file attributes;
- 16 returning the conventional file attributes to the client;

17 storing a remaining subset of the foreign file attributes which are not equivalent to a
18 corresponding subset of file attributes of the native file system, the remaining subset of the foreign
19 file attributes hereinafter known as extended file attributes;
A³ 20 accessing of the foreign file attributes stored in the local data processing system by the
21 local data processing system client to process the foreign file; and
22 processing by the local data processing system client the foreign file using the stored
23 foreign file attributes.

1 2. (Deleted)

1 3. The method of claim 2 further comprising the steps of:
2 accessing of the foreign file by the client via a protocol of the native file system, the
A⁴ 3 accessing being performed in a similar manner to accessing a native file system file; and
4 accessing of the foreign file by the client by use of the extended file attributes, the
5 accessing being performed via a protocol different from the native file system protocol.

1 4. The method of claim 2 wherein the storing step further comprises:
2 starting an expiration timer corresponding to the extended file attributes; and
3 removing the extended file attributes from the local data processing system storage after
4 the expiration of the expiration timer.

1 5. The method of claim 2 wherein the sending of the foreign file attributes is performed by a
2 web server located on the remote system, the web server being capable of sending and receiving
3 messages via a network.

1 6. The method of claim 2 further comprising the steps of:
2 storing the extended file attributes in a shared memory portion of the local data processing
3 system storage which is accessible by the client and other local data processing system processes;
4 associating a unique handle with the extended file attributes; and
5 providing the unique handle to a local data processing system process to enable the local
6 data processing system process to access the extended file attributes.

1 7. (Amended) An article of manufacture for use in a computer system for accessing a
2 foreign file system from a local data processing system data processing system with a native file
3 system, said foreign file system being located on a remote data processing system, said foreign file
4 system having a set of foreign file attributes corresponding to each of a plurality of files in the
5 foreign file system, and said native file system having a set of native file attributes corresponding
6 to each of a plurality of files in the native file system, said article of manufacture comprising a
7 computer-readable storage medium having a computer program embodied in said medium which
8 causes the computer system to execute the method steps comprising:

9 generating a request from a client on the local data processing system to the remote data
10 processing system to open a foreign file in the foreign file system;

11 opening of the of the foreign file by the foreign file system;

12 sending of the file attributes of the foreign file, hereinafter foreign file attributes, to the
13 local data processing system;

14 storing of the foreign file attributes by the local data processing system;

15 determining a subset of the foreign file attributes which are equivalent to a corresponding
16 subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter
17 known as conventional file attributes;

18 returning the conventional file attributes to the client;

19 storing a remaining subset of the foreign file attributes which are not equivalent to a
20 corresponding subset of file attributes of the native file system, the remaining subset of the foreign
21 file attributes hereinafter known as extended file attributes;

22 accessing of the foreign file attributes stored in the local data processing system by the
A⁴ 23 local data processing system client to process the foreign file; and
24 processing by the local data processing system client the foreign file using the stored
25 foreign file attributes.

1 8. (Deleted)

1 9. The article of manufacture of claim 8 wherein the method steps further comprise the steps
2 of:
3 accessing of the foreign file by the client via a protocol of the native file system, the
4 accessing being performed in a similar manner to accessing a native file system file; and
5 accessing of the foreign file by the client by use of the extended file attributes, the
6 accessing being performed via a protocol different from the native file system protocol.

A⁵
1 10. The article of manufacture of claim 8 wherein the storing step further comprises:
2 starting an expiration timer corresponding to the extended file attributes; and
3 removing the extended file attributes from the local data processing system storage after
4 the expiration of the expiration timer.

1 11. The article of manufacture of claim 8 wherein the sending of the foreign file attributes is
2 performed by a web server located on the remote system, the web server being capable of sending
3 and receiving messages via a network.

AS
1 12. The article of manufacture of claim 8 wherein the method steps further comprise the steps
2 of:
3 storing the extended file attributes in a shared memory portion of the local data processing
4 system storage which is accessible by the client and other local data processing system processes;
5 associating a unique handle with the extended file attributes; and
6 providing the unique handle to a local data processing system process to enable the local
7 data processing system process to access the extended file attributes.

1 13. (Amended) A distributed computer system for accessing a foreign file system from a local
2 data processing system with a native file system, said foreign file system being located on a
3 remote data processing system, said foreign file system having a set of foreign file attributes
4 corresponding to each of a plurality of files in the foreign file system, and said native file system
5 having a set of native file attributes corresponding to each of a plurality of files in the native file
6 system, said distributed computer system comprising:

7 a requestor for generating a request from a client on the local data processing system to
8 the remote data processing system to open a foreign file in the foreign file system;

9 a foreign file which can be opened by the foreign file system;

10 a sender for sending the file attributes of the foreign file, hereinafter foreign file attributes,
11 to the local data processing system;

12 storage for storing of the foreign file attributes by the local data processing system;

13 a comparator for determining a subset of the foreign file attributes which are equivalent to
14 a corresponding subset of file attributes of the native file system, the subset of the foreign file
15 attributes hereinafter known as conventional file attributes;

16 a data transfer for returning the conventional file attributes to the client; and

17 storage for storing a remaining subset of the foreign file attributes which are not
18 equivalent to a corresponding subset of file attributes of the native file system, the remaining
19 subset of the foreign file attributes hereinafter known as extended file attributes;

20 a file access for accessing the foreign file attributes stored in the local data processing
21 system by the local data processing system client to process the foreign file; and

A⁵²
23 a processor for processing by the local data processing system client the foreign file using
the stored foreign file attributes.

1 14. (Deleted)

1 15. The distributed computer system of claim 14 further comprising:
2 a file access for accessing by the client the foreign file via a protocol of the native file
3 system, the accessing being performed in a similar manner to accessing a native file system file;
4 and
5 a file access for accessing by the client the foreign file by use of the extended file
6 attributes, the accessing being performed via a protocol different from the native file system
7 protocol.

A⁶
1 16. The distributed computer system of claim 14 wherein the storage further comprises:
2 an expiration timer corresponding to the extended file attributes; and
3 storage access for removing the extended file attributes from the local data processing
4 system storage after the expiration of the expiration timer.

1 17. The distributed computer system of claim 14 wherein the sender of the foreign file
2 attributes is a web server located on the remote system, the web server being capable of sending
3 and receiving messages via a network.

Ag
1 18. The distributed computer system of claim 14 further comprising:
2 a shared memory portion of the local data processing system storage which is accessible
3 by the client and other local data processing system processes for storing the extended file
4 attributes;
5 a unique handle associated with the extended file attributes; and
6 a local data processing system process which uses the unique handle to enable the local
7 data processing system process to access the extended file attributes.
